## **CLAIMS**

1. A method of supplying dampening solution for an offset printing machine comprising the steps of detecting a viscosity of a dampening solution at a normal temperature, selectively adding at least water and surface active agent to the dampening solution so as to obtain an aimed viscosity value of the dampening solution, and supplying the dampening solution having the aimed viscosity to an offset printing machine at the normal temperature.

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- 2. A method of supplying a dampening solution for an offset printing machine comprising the steps of detecting a viscosity of a dampening solution at a normal temperature, selectively adding at least water, surface active agent and viscosity increasing agent to the dampening solution so as to obtain an aimed viscosity value of the dampening solution, and supplying the dampening solution having the aimed viscosity to an offset printing machine at the normal temperature.
- 3. A method of supplying a dampening solution for an offset printing machine comprising the steps of detecting a viscosity of a dampening solution at a normal temperature, selectively adding at least water, etchant and viscosity increasing agent to the dampening solution so as to obtain aimed pH value and aimed viscosity of the dampening solution, and supplying the dampening solution having the aimed pH value and aimed viscosity to an offset printing machine at the normal temperature.

4. The method of supplying a dampening solution for an offset printing machine according to any one of claims 1 to 3, wherein the dampening solution is additionally supplied to the offset printing machine by an amount corresponding to a consumed amount thereof through one-way manner.

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- 5. An apparatus for supplying a dampening solution for an offset printing machine comprising a mixing tank for adjusting a dampening solution at a normal temperature, a viscosity measuring unit for measuring a viscosity of the dampening solution in the mixing tank, an adding unit for selectively adding at least water and surface active agent to the dampening solution in the mixing tank so as to obtain an aimed viscosity, and a supply unit for supplying the dampening solution having the aimed viscosity to an offset printing machine at the normal temperature.
- An apparatus for supplying a dampening solution for an offset printing machine comprising a mixing tank for adjusting a dampening solution at a normal temperature, a viscosity measuring unit for measuring a viscosity of the dampening solution in the mixing tank, an adding unit for selectively adding at least water, surface active agent and viscosity increasing agent to the dampening solution in the mixing tank so as to obtain an aimed viscosity, and a supply unit for supplying the dampening solution having the aimed viscosity to an offset printing machine at the normal temperature.
- 25 7. An apparatus for supplying a dampening solution for an offset printing machine comprising a mixing tank for adjusting a dampening

solution at a normal temperature, a pH concentration measuring unit for measuring pH value of the dampening solution in the mixing tank, a viscosity measuring unit for measuring a viscosity of the dampening solution in the mixing tank, an adding unit for selectively adding at least water, etchant and viscosity increasing agent to the dampening solution in the mixing tank so as to obtain aimed pH value and aimed viscosity, and a supply unit for supplying the dampening solution having the aimed pH value and aimed viscosity to an offset printing machine at the normal temperature.

8. The apparatus for supplying a dampening solution for an offset printing machine according to any one of claims 5 to 7, wherein the supply unit for supplying the dampening solution to the offset printing machine is provided with a one-way conduit connecting the mixing tank to a dampening fountain, a water-level meter for detecting water-level of the dampening solution in the dampening fountain, and a valve for additionally supplying the dampening solution to the dampening fountain by opening the one-way conduit in response to a signal from the water-level meter.